



Motorized X-ray
viewers with vertical
belt system

for reading and
demonstrating as many
as 120, 220, 320
or 400 radiographs
(14" by 17")

ROTOLUX 220-J

ROTOLUX

PLANILUX®

CE

ROTOLUX – simply the better solution!

ROTOLUX is the uniquely versatile, extremely reliable and easy-to-operate viewing system holding an amazing quantity of film.

It is the X-ray viewer of choice where a particularly large number of radiographs has to be demonstrated or evaluated, and whenever the capacity of a magazine-type film viewer fails to meet requirements.

While the radiologist is busy concentrating exclusively on his diagnostic task, members of his staff can load and unload the film carrier belt. This vastly increases the productivity of the diagnostic department, saving valuable time and money.

The extraordinary film capacity of ROTOLUX allows radiographs coming from different departments to be clearly arranged, effectively demonstrated and/or interpreted on a single viewer.

ROTOLUX offers ample leg room, perfect desk height, and large work surface – features which combine to make it an ergonomically ideal workplace for the radiologist. The belt conveyor runs practically noise-free,



so that your concentration is not disturbed.



The flicker-free high-frequency lighting ensures film reading without eye-strain, even over an extended period of time.

The X-ray viewer is also available with four motorized shutters that eliminate all extraneous light; with this ROTOLUX satisfies the stringent requirements of the German Industrial Standard (DIN) 6856 of Oct. 1, 1995. An impressive advantage offered only by PLANILUX.

Thanks to its proven dependability and extremely favorable price/performance ratio, ROTOLUX has become one of the most successful film-reading viewers on the market.



ROTOLUX comes in the following versions:

ROTO 120, 220, 320, 400	with 2 viewing panels
ROTO...-8	with 2 viewing panels, subdivided into 8 sections
ROTO...-J	with 2 viewing panels, the lower panel with 4 motorized shutters
ROTO...-4-J	with 2 viewing panels, the upper subdivided into 4 sections, the lower with 4 motorized shutters

ROTOLUX The sum of the quality features

- ✓ capacity e.g. 120, 220, 320 or 400 radiographs 14" by 17"
- ✓ rapid belt-driven film transport
- ✓ operation via touch keys and foot switch
- ✓ 6° angulation of the viewing panels
- ✓ homogeneous illumination of the viewing panels
- ✓ brilliant daylight, flicker-free lighting
- ✓ high luminance, can be continuously reduced to approx. 20 % of its maximum value
- ✓ optional 4 motorized shutters
- ✓ flat film holders, top and bottom
- ✓ antistatic protection
- ✓ extremely silent operation
- ✓ excellent dependable operation
- ✓ mobile and exceptionally easy to service



Film storage and belt-driven film transport

The film carrier belt consists of a transparent high-quality polyester material; the flat film holders subdivide the belt horizontally into continuously numbered 17" (43 cm) high segments.

ROTOLUX offers the great advantage that the films can be held at both the upper and lower edge of each segment. This ensures optimum utilization of the available viewing area, particularly when smaller film formats are used.

The viewing panels of ROTOLUX are angled at roughly 6°, so retaining strings that interfere with film viewing and handling are not needed. These elastic rubber strings are provided on request (e. g. for mammography films) at no extra cost.

By activating the touch keys or the twin foot switch, the belt quickly moves up and down and, with the help of sensors, is accurately stopped in front of the viewing panels.

Different speeds can be selected for film transport. A unique antistatic protection device largely rules out electrostatic charges which, in turn, prevents dust from collecting on and damaging the carrier belt.

The radiographs are wound on the lower or upper drum and held in place by broad rubber bands. Loss of films need not to be feared.

Interpretation and demonstration of films

For reading and demonstration purposes you can advance the film carrier belt by one or two segments or move it continuously up or down.

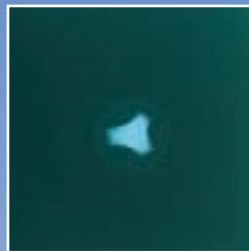
The belt-driven film transport is turned on via the twin foot switch or the touch keys arranged on the right and left in front of the lower viewing panel.

For dazzle-free viewing we recommend our ROTOLUX ...J and ROTOLUX ...-4-J models which meet the stringent requirements of the German Industrial Standard (DIN) 6856. The lower viewing panel of these models are provided with 4 motorized

shutters which can be moved separately or also to some extent in unison. The shutters afford edge-sharp collimation of even small image areas.

Collimation combined with luminance control appreciably improves recognition of image details. A unique feature which is only offered by PLANILUX.

Just compare the adjacent radiographs and you will see the difference.



Without collimation and with medium luminance



With collimation and accurately matched luminance

High luminance and brilliant light, flicker-free with an 80 % control range

The two viewing panels of ROTOLUX are illuminated by daylight fluorescent lamps



(roughly 6200 K) homogeneously and flicker-free. The lamps are switched on and off and adjusted separately. The high luminance can be smoothly reduced to about 20 % of its maximum value. This ensures optimum matching of the light to the films' contrast and to the ambient light.

The upper and lower viewing panels of ROTOLUX ...-8 are

indirectly subdivided into 4 sections which can be switched on and off separately or together. With ROTOLUX ...-4-J only the upper viewing panel features this subdivision. Each tier of lighting can be dimmed smoothly and in unison.

Special models with random access, Auto-Format-Collimation (AFC) and Joystick control of the shutters

Control board of ROTOLUX -4-J with Joystick (special equipment)



The new control board is placed in the panel below the viewing area and offers you much more space on the desk for placing radiographs and other equipment.

The control board includes, depending to the model, the belt-, light- and shutter controls.

Generally, all special models offer at least random access and light control.

The two viewing areas can be switched on/off separately and controlled as a unit.

A display in the control board indicates the panel selected.

Units with shutters furthermore offer AFC. Frequently used formats of Collimation can be easily programmed by the user, stored and recalled whenever required.

These models also offer a joystick that allows you to move the selected Collimation format from radiograph to radiograph. The format is held during movement of the shutters.

The new shutter control system increases your productivity, saving valuable time and money.

Of course, each of the 4 shutters can also be adjusted separately. The smallest available Collimation format is approx. 4 by 4 inch.



Perfection also in details

The 2 outlets in the front section of the ROTOLUX may be used for connection of extra equipment such as an iris lamp and a dictating machine.

If ROTOLUX is left unattended for more than 30 minutes, the viewing panel's lights are switched off automatically. This saves electric energy and prevents

unnecessary heating of both machine and carrier belt. If there is a power failure or other fault, the belt can still be moved by hand. So even in the event of a power failure, access to the film is assured.

The dark tabletop is plastic-coated, easy to clean and has, in addition to rounded edges, a structured surface to keep reflected light at a low level.

The lateral frames of the viewing panels are finished in a matt black tone to prevent unwanted reflection.



unit with foil touch control (standard equipment)

Installation and service



All ROTOLUX models are mobile and easy to move to the site of installation. They are designed to fit through door openings measuring 72 cm in width and 196 cm in height.

For connection of the X-ray viewer to a 230 V, 50 Hz power line, a three-core cable, 2 m long, with plug is provided (if required, country-specific plugs are also available, please specify!).

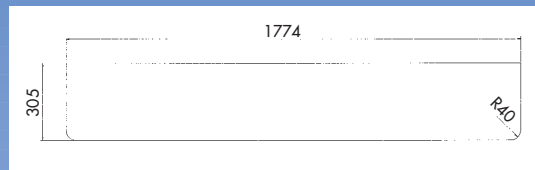
After you fit the tabletop and plug the cable into a power-socket, the viewer is ready for operation. Even a slightly uneven floor at the installation site will not compromise the operational safety of the unit.

Fluorescent lamps are replaced from the front of the unit. For servicing the viewer, all exterior panels can be readily removed to gain access to the internal components

Special equipment (at no extra charge if factory installed at time of production, please specify)

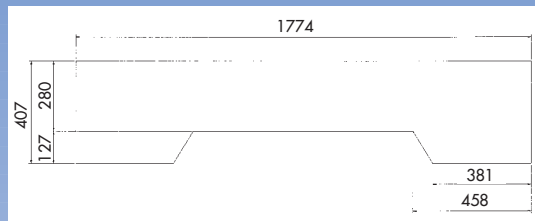
Special tabletop, type B
as per drawing

Order-No 309001



Special tabletop, type C
as per drawing

Order-No 309002



Accessories

Magnifying lens can be shifted across the entire width of the viewing area, adjustable in height, with extra sharp biconvex lens of optical glass, 120 mm in diameter, 2.0 fold magnification, to be folded out for use.

Order-No 403079

For a further choice of lenses see Accessories leaflet.

Iris lamps come in various versions.
See separate leaflet.

Videolux Camera System
see separate leaflet.

Technical data, valid for all models

Transport speed 1 segment: approx.	3-5 seconds	Transport speed 2 segments: approx.	5-7 seconds
For connection to	230 V., 50 Hz, 3,2 A. oder 120 V., 60 Hz. 6,8 A.		

Model	ROTOLUX, capacity 120 radiographs of the 17" (35 x 43 cm) format			
	120	120-8	120-J	120-4-J
Transport speed: Start - End	approx. 75 seconds			
Number/output of fluorescent lamps	8 x 58 W	16 x 32 W	8 x 58 W	8 x 32 W top 4 x 58 W bottom
Max. density, approx. *	4800 cd/m ²	3800 cd/m ²	4800 cd/m ²	3800 cd/m ² top 4800 cd/m ² bottom
Max. power input, approx.	580 W	640 W	740 W	775 W
Net weight, approx.	420 kg	435 kg	460 kg	470 kg
Gross transport weight, approx.	590 kg	605 kg	630 kg	640 kg
In compliance with DIN 6856	no	no	yes, at bottom	yes, at bottom
Order-No, standard design	122506	122505	122508	122507
Order-No, special design	122720	122721	122722	122723

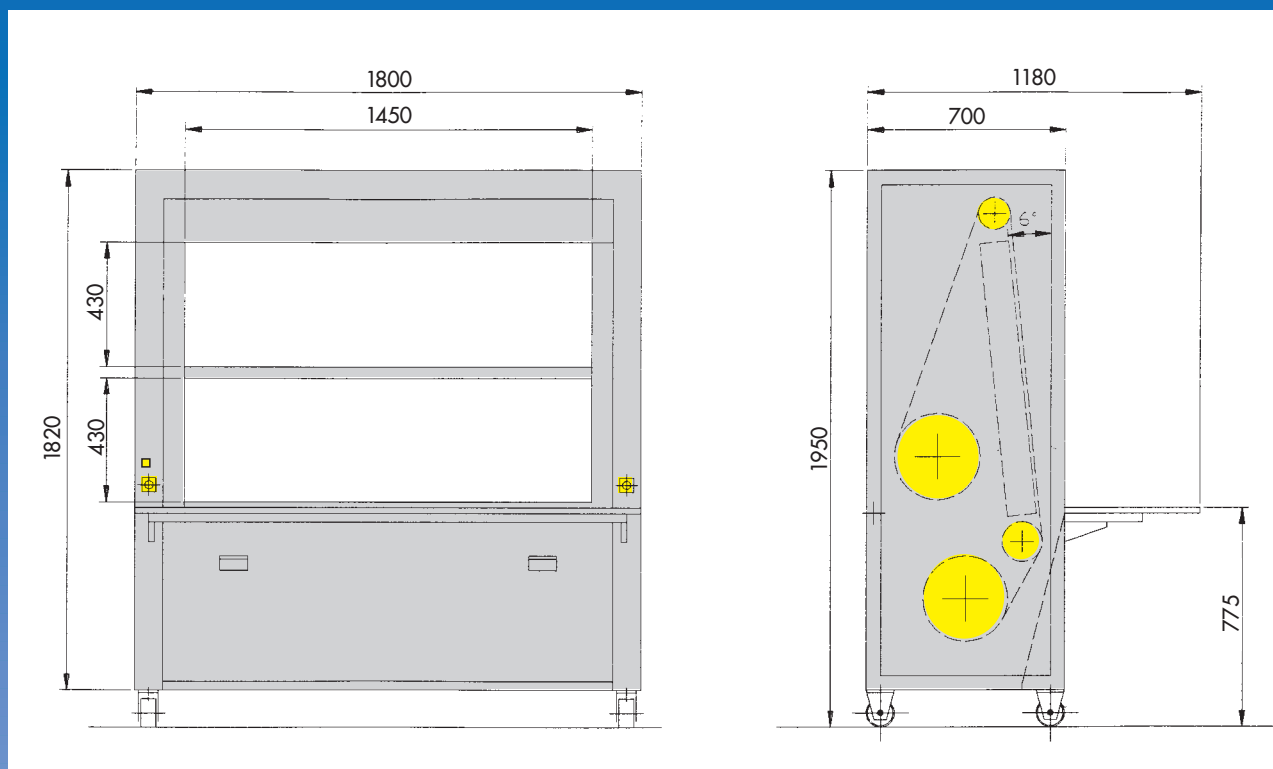
Model	ROTOLUX, capacity 220 radiographs of the 17" (35 x 43 cm) format			
	220	220-8	220-J	220-4-J
Transport speed: Start - End	approx. 90 seconds			
Number/output of fluorescent lamps	8 x 58 W	16 x 32 W	8 x 58 W	8 x 32 W top 4 x 58 W bottom
Max. density, approx. *	4800 cd/m ²	3800 cd/m ²	4800 cd/m ²	3800 cd/m ² top 4800 cd/m ² bottom
Max. power input, approx.	580 W	640 W	740 W	775 W
Net weight, approx.	435 kg	450 kg	475 kg	485 kg
Gross transport weight, approx.	605 kg	620 kg	645 kg	655 kg
In compliance with DIN 6856	no	no	yes, at bottom	yes, at bottom
Order-No, standard design	122105	122109	122113	122117
Order-No, special design	122730	122731	122732	122733

Model	ROTOLUX, capacity 320 radiographs of the 17" (35 x 43 cm) format			
	320	320-8	320-J	320-4-J
Transport speed: Start - End	approx. 125 seconds			
Number/output of fluorescent lamps	8 x 58 W	16 x 32 W	8 x 58 W	8 x 32 W top 4 x 58 W bottom
Max. density, approx. *	4800 cd/m ²	3800 cd/m ²	4800 cd/m ²	3800 cd/m ² top 4800 cd/m ² bottom
Max. power input, approx.	580 W	640 W	740 W	775 W
Net weight, approx.	450 kg	465 kg	490 kg	500 kg
Gross transport weight, approx.	620 kg	635 kg	660 kg	670 kg
In compliance with DIN 6856	no	no	yes, at bottom	yes, at bottom
Order-No, standard design	122125	122129	122133	122137
Order-No, special design	122740	122741	122742	122743

Model	ROTOLUX, capacity 400 radiographs of the 17" (35 x 43 cm) format			
	400	400-8	400-J	400-4-J
Transport speed: Start - End	approx. 150 seconds			
Number/output of fluorescent lamps	8 x 58 W	16 x 32 W	8 x 58 W	8 x 32 W top 4 x 58 W bottom
Max. density, approx. *	4800 cd/m ²	3800 cd/m ²	4800 cd/m ²	3800 cd/m ² top 4800 cd/m ² bottom
Max. power input, approx.	580 W	640 W	740 W	775 W
Net weight, approx.	465 kg	480 kg	505 kg	515 kg
Gross transport weight, approx.	635 kg	650 kg	675 kg	685 kg
In compliance with DIN 6856	no	no	yes, at bottom	yes, at bottom
Order-No, standard design	122145	122149	122153	122157
Order-No, special design	122750	122751	122752	122753

* The density value of the fluorescent lamps in cd/m² takes into consideration a loss of roughly 10 % of the max. value.

Dimensions



Color: RAL 9002 (grey-white) structure powder-coated

Our products are only delivered through qualified dealers.
Subject to design alterations without prior notice. Issue: March 1998

PLANILUX®

Gerätebau Felix Schulte GmbH & Co. KG.
P.O.Box 11 49 · D-59562 Warstein
Phone 0 29 02 / 97 13 - 0 · Fax 0 29 02 / 97 13 - 88
E-Mail: planilux@t-online.de
Internet: <http://www.planilux.de>